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| 09/312,823      | 05/17/1999  | TOMISHIGE TAGUCHI    |                     | 3090             |

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EXAMINER

PEYTON, TAMMARA R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2182

DATE MAILED: 09/25/2003

25

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/312,823

Applicant(s)

TAGUCHI, TOMISHIGE

Examiner

Tammara R Peyton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 230-256 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 230-256 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 230-253 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kiyozumi*, JP2122355, Published May 10, 1990, [IDS filed April 26, 2001, paper number 14] and US Patent number 4,902,146, *Ishikawa*, Published February 20, 1990.
2. As per claims 230, 234, 237, and 252, *Kiyozumi* discloses a system with a connector for connecting a detachable external device to an information processing apparatus. *Kiyozumi* also teaches of a recognition unit that recognizes when the detachable external device is connected to the connector. [page 5, *Kiyozumi*] *Kiyozumi* further teaches a loading means [CPU, 1] that executes a program for loading a device driver for the connected detachable external device [circuit, etc.] connected by said connector from the connected detachable external device. [Note Abstract] However, *Kiyozumi* does not disclose discriminating on the type of detachable external device and based on that discrimination selecting a device driver program.

3. *Ishikawa* teaches an information processing apparatus with a recognition/discrimination unit in a central processing unit that recognizes a connection and a specific card type of a detachable device connected via a connector to said information processing apparatus. *Ishikawa* specifically teaches of a system with a memory option card that incorporates an integrated driver ID - which uniquely identifies the specific card type. Further, *Ishikawa* teaches a loading unit that in response to the recognition/discrimination unit that downloads an integrated driver ID. Specifically, in Figs. 5a and 5b, *Ishikawa* discloses recognition/discrimination steps: 502/512, 503/514, and 506/517 that determines 1) if there a card in either connector slots – 502/512 and 2) if there is a card in either connector slots what kind of card is it - 503/514 and 506/517. Once the specific card type is determined, based on the card ID, specific card information is downloaded from an internal memory and stored in the memory of the information processing apparatus. Therefore, it would have been obvious that *Ishikawa* teaches the information processing apparatus with a recognition/discrimination unit that recognizes a specific type of device connected via the connector. Further, it would have been obvious that based on the type of detachable external device specific card information is selected that would enable the information processing apparatus to communicate (control) the device. [*Ishikawa*, note abstract, col. 1, lines 47- col. 6, lines 34, See Figs. 1-5b]

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4. It would have been obvious to combine in an information processing apparatus with *Ishikawa's* recognition/discrimination unit that recognizes a device type, and select device specific information from an internal memory of the device to a memory in the information processing unit via a connector to *Kiyozumi's* system because one of ordinary skill would readily recognize that by implementing the inherent loading unit in *Kiyozumi's* system which stores and loads a device driver program, stored internally, to control a specific connected external device, would enable *Kiyozumi's* system to selectively implement specific control functions that are added without stopping the system.

5. As per claims 231 and 235, it would have been obvious to one of ordinary skill that *Kiyozumi* teaches that the loaded device driver comprises the control unit for controlling the connected external devices.

6. As per claims 232 and 236, *Ishikawa* teaches further comprising a reading unit arranged for reading data indicating the device type of the connected external device from the external device, wherein said recognition/discrimination unit discriminates the device type on the basis of the data read by said reading unit.

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7. As per claim 233, official notice is taken that the apparatus comprises an electronic camera. Further, the apparatus claimed by applicant could be incorporated in *Ishikawa-Kiyozumi* system and not depart from its inventive concept.

8. As per claims 238, 243, 244, 248, and 253, *Kiyozumi* discloses a system with a connector for connecting a detachable external device to an information processing apparatus. *Kiyozumi* further teaches a loading means [CPU, 1] that executes a program for loading a device driver for the connected detachable external device [circuit, etc.] connected by said connector from the connected detachable external device. [Note Abstract] However, *Kiyozumi* does not disclose a discrimination unit, arranged for discriminating whether an external device is a first type of device in which a memory is provided for selecting a device driver program for controlling the external device or a second type of device in which the memory is not provided.

9. *Ishikawa* teaches an information processing apparatus with a discrimination unit, arranged for discriminating whether an external device is a first type of device [emulation or font card] in which a memory is provided for selecting device specific information for controlling the external device or a second type of device [RAM card] in which the memory is not provided; and a loading unit, if said discrimination unit discriminates that the external device is the first type of device.

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10. *Ishikawa* teaches the information processing apparatus with a discrimination unit in a central processing unit that recognizes a connection and a specific/first type of a detachable device connected via a connector to said information processing apparatus. *Ishikawa* specifically teaches of a system with a memory option card that incorporates an integrated driver ID - which uniquely identifies a specific card type. Further, *Ishikawa* teaches a loading unit that in response to the discrimination unit - downloads the integrated driver ID via an inherent request from the central processing unit. Specifically, in Figs. 5a and 5b, *Ishikawa* discloses discrimination steps: 502/512, 503/514, and 506/517 that determines 1) if there a card in either connector slots – 502/512 and 2) if there is a card in either connector slots what kind of card is it - 503/514 and 506/517. Once the specific/first card type is determined, and whether a memory is provided for this specific card type based on the card ID, specific card information is downloaded from an internal memory and stored in the memory of the information processing apparatus. Therefore, it would have been obvious that *Ishikawa* teaches of an apparatus with a discrimination means that recognizes a specific/first type of device and loads specific card information based on the specific/first type of device connected via a connector. Further, it would have been obvious that based on the type of detachable external device specific card information is selected that would enable the information processing apparatus to communicate (control) the device. [*Ishikawa*, note abstract, col. 1, lines 47- col. 6, lines 34, See Figs. 1-5b]

11. It would have been obvious to combine in an information processing apparatus with *Ishikawa's* discrimination unit that recognizes a specific/first device type [emulation or font card] in which a memory is provided for storing a device specific information for controlling the external device or a second type of device [RAM card] in which the memory is not provided; and download device specific information if said discrimination unit recognizes the external device is the specific/first device type to *Kiyozumi's* system that stores and loads device driver program from the internal memory to control the specific connected external device, would add flexibility to *Kiyozumi* by enabling the system to discriminate and selectively control multiple device types added without stopping the system.

12. As per claims 245 and 249, *Ishikawa's* system further comprises a recognizing/discriminating step that recognizes connection of the external device to an information processing apparatus, wherein said discriminating step discriminates the device type in response to said recognizing step recognizing the connection of the external device.

13. As per claims 246 and 250, *Ishikawa* teaches further comprising a reading unit arranged for reading data indicating the device type of the connected external device from the external device, wherein said recognition/discrimination unit discriminates the device type on the basis of the data read by said reading unit.



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14. As per claims 247 and 251, *Kiyozumi* teaches said loading step for the second type of device that loads the device driver program for controlling the external device from a memory provided in an information processing apparatus.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 230-237, 252, and 254-256, are rejected under 35 U.S.C. 102(b) as being anticipated by *Yabumoto*, JP363273954, Published November 11, 1988.

16. As per claims 230, 234, 237, 252, and 254-256, *Yabumoto* teaches the invention comprising:

a connector unit, arranged for connecting a detachable external device to said information processing apparatus; [connection between external device 4 and the computer, Fig.1]

a recognition unit, arranged for recognizing the connection of the external device to said information processing apparatus;

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a discrimination unit, arranged for discriminating a device type [signal 401 indicating device type] of the external detachable device connected by said connection unit on the basis of data stored in the connected external device; and [4, when the external device 4 is connected to the system, a device type signal 401 is received by the system. As such, the system inherently has means to detect the existence of the signal 401 thereby determining whether an external device is connected thereto through the connector], and

a loading unit, arranged for, in response to said recognition unit recognizing connection of the external device, selecting a device driver program existing in a memory area [1] provided in said information processing apparatus, on the basis of the device type discriminated by said discrimination unit, and loading the selected device drive program. [Figs. 1-3, See English Abstract]

17. *Yabumoto* teaches of a system wherein the connection of a detachable external device is recognized and based on that recognition a device driver is selected from a memory area provided in said information processing apparatus. The selected device driver is for controlling the connected detachable external device.

18. As per claims 231 and 235, *Yabumoto* inherently teaches that the loaded device driver comprises the control unit step for controlling the connected external devices.

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19. As per claims 232 and 236, *Yabumoto* teaches further comprising a reading unit arranged for reading data indicating the device type of the connected external device from the external device, wherein said recognition/discrimination unit discriminates the device type on the basis of the data read by said reading unit.

20. As per claim 233, official notice is taken that the apparatus comprises an electronic camera. Further, the apparatus claimed by applicant could be incorporated in *Yabumoto* system and not depart from its inventive concept.

21. As per claim 254, *Yabumoto* teaches information processing apparatus comprising:

a discrimination unit, arranged for discriminating a device type [signal 401 indicating device type] of an external device on the basis of data stored in the external device; and

a loading unit, arranged for selecting a device driver program for controlling the external device in a memory area [1] provided in said information processing apparatus, on the basis of the device type discriminated by said discrimination unit, and loading the selected device driver program. [Figs. 1-3, See English Abstract]

22. As per claim 255, *Yabumoto* teaches a method of loading a device program for controlling an external device, said method comprising:

a discriminating step of discriminating a device type of the external device on the basis of data stored in the external device; and

a loading step of selecting the device driver program in a memory area provided in the information processing apparatus, on the basis of the device type discriminated in said discriminating step, and loading the selected device driver program. [Figs. 1-3, See English Abstract]

23. As per claim 256, *Yabumoto* teaches a computer program for instructing an information processing apparatus to perform:

a discriminating step of discriminating a device type of an external device on the basis of data stored in the external device; and

a loading step of selecting the device driver program in a memory area provided in the information processing apparatus, on the basis of the device type discriminated in said discriminating step, and loading the selected device driver program. [Figs. 1-3, See English Abstract]

**RESPONSE TO APPLICANT'S ARGUMENTS**

24. As per independent claims 230, 234, 237, and 252, Applicant argues that *Kiyozumi* and *Ishikawa* does not teaches a loading unit, arranged for selecting the device driver program for controlling the external device in the memory provided in the external device or the device driver program in a memory provided in the information processing apparatus. Examiner respectfully disagrees with Applicant. Based in the alternate language in the above claims *Ishikawa* in combination with *Kiyozumi* teaches a loading unit that stores and loads a device driver program, stored internally, to control a specific connected external device with a recognition/discrimination unit that recognizes a device type, and select device specific information from an internal memory of the device to a memory in the information processing.

25. As per independent claims 238, 243, 244, and 248, Applicant argues that *Kiyozumi* and *Ishikawa* does not teach a system with a discriminating step that discriminates whether the external device is a first type of device in which a memory is provided for storing the device driver program or a second type of device in which the memory is not provided and a loading step selecting the device driver program in the memory provided in the external device or the device driver program in a memory an information processing apparatus, and loading the device driver, if said discrimination unit discriminates select the external device. However, Applicant does state (pg. 13, Paper # 24) that "*Ishikawa* patent discloses a CPU that discriminates the function of the

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memory card on the basis of one of the slots to which the memory card is inserted...”,

“Yet, *Ishikawa* does not disclose the discrimination unit of the present invention”.

Examiner respectfully disagrees with Applicant that *Ishikawa* does not teach such a discrimination unit. *Ishikawa*'s discrimination unit recognizes a specific/first device type [emulation or font card], depending on which slot the external device is inserted, in which a memory is provided for storing a device specific information for controlling the external device or a second type of device [RAM card] in which the memory is not provided; and download device specific information if said discrimination unit recognizes the external device is the specific/first device type. By adding *Kiyozumi*'s loading device driver program step to control the specific connected external device, would add flexibility to *Kiyozumi* by enabling the system to discriminate and selectively control multiple device types added without stopping the system.

26. As per independent claims 230, 234, 237, 252, 254, 255, and 256, Applicant argues (pg. 14, Paper #24) that *Yabumoto* teaches selecting one of a plurality of drivers stored in the information processing apparatus, not in the external device. Examiner respectfully agrees with Applicant that *Yabumoto* does not teaches selecting one of a plurality of drivers stored in the external device, nonetheless Examiner respectfully disagrees with Applicant about the interpretation of the above claims. Claims 230, 234, 237, 252, 255, and 256, states the related claim language of “selecting a device driver program provided in the external device, for controlling the connected external device or

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(emphasis added) a device driver program existing in a memory area provided in said information processing apparatus, for controlling the connected external device....”, these claims are presented in alternative language requiring one “or” the other be found. Examiner read the claims as “a loading unit, arranged for, in response to said recognition unit recognizing connection of the external device, *selecting a device driver program existing in a memory area [1] provided in said information processing apparatus*, on the basis of the device type discriminated by said discrimination unit, and loading the selected device drive program”, because of Appellant use of “or” in the claim. Specifically, the device driver may be read from a memory in the external device or another memory stored in the information processing apparatus. Therefore, because of the alternate language used by Applicant in the above claims, the office is taking the position that *Yabumoto* teaches one alternate of the claimed system with a detachable external device that is recognized based on a type signal and based on that recognition a device driver is selected from a memory area provided in an information processing apparatus.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 6:30 - 4:00 from Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks



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Washington, D.C. 20231. Faxes for Official/formal communications

intended for entry should be sent to: (703) 746-7238, After Final (703)

746-7239

or, for informal or draft communications, to:

(703) 746-5676 (please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor

(Receptionist).

Tammara Peyton

September 22, 2003



JEFFREY GAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100